

## **DuPont Performance Coatings**

Front Royal, Virginia

E-3 First Annual Status Report

November 26, 2003

In an effort to retain our Exemplary Environmental Enterprise (E-3) status we report on the past year's plant wide achievements and future projects that will enhance our environmental performance.

### **Environmental Awards**

Front Royal became EPA Performance Track Certified in April of 2003 to add to the DEQ E-3 and ISO 14001 Certifications.

### **Waste Reduction**

Front Royal successfully reduced solid waste generation from 1.0 lbs per gallon of product produced to 0.89 lbs per gallon of product produced. This resulted in a reduction of approximately 1,000,000 lbs of solid waste. The reduction was realized by a site wide effort to reduce waste. There were many small improvements implemented site wide in order to achieve the substantial reduction. Most of the improvements came from upfront environmental project reviews to make design changes that reduce waste.

### **Air Emission Reduction**

Front Royal successfully reduced VOC air emissions from 0.022 lbs per gallon of product produced to 0.19 lbs per gallon of product produced. This resulted in a reduction of approximately 15 tons of VOC emissions. This was a result of reducing fugitive emissions by instituting closed loading of liquid raw materials in the manufacturing area of the plant. Front Royal also redesigned dispersion mills to reduce fugitive emissions. The changes not only reduced air emissions but also reduced operator exposure to VOC emissions and improved yield.

### **Electricity Reduction**

Front Royal reduced electricity usage by approximately 154,000 KWH for heating and cooling of a storage building which is required to stay at a temperature between 48 deg F and 32 deg F for quality purposes of the product stored in the building. The improvement project consisted of improving the air handling system and the insulation of the walls and ceiling of the storage building.

### **Increased Market Demand for Paint Concentrate**

Paint concentrate is a product from the on site solvent reclamation system which is normally disposed of as a waste. DuPont has successfully developed a market to use the paint concentrate to make industrial paint used for rust prevention coatings in the steel industry. The paint concentrate is utilized to produce a low cost high quality coating that does not require color control. Although the demand did not increase much in the last 12 months a new customer has been established which will increase demand by 10-20 % in the coming years. Demand has been approximately 210,000 lbs/yr over the last 1½ yrs.

### **Future Plans**

- 1) Front Royal plans to continually reduce solid waste by developing a method to use wash solvent from the clean up of one batch in the production of the next batch by using a raw material as the wash solvent media. Initial trials have been promising. The next step is to develop a process, which will ensure product quality.
- 2) Front Royal is planning to continually reduce air emissions by purchasing and installing paint filling equipment with closed wash up capability. It is planned to use this filling equipment as a proto type to convert all filling equipment to closed wash up in the future and greatly reduce fugitive emissions from the filling operation.

Respectfully,

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Environmental Resource  
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